

WILL CAPTAIN LEAVITT SUCCEED IN REACHING LUSITANIA? FAMOUS DEEP-SEA DIVER WILL TRY TO RECOVER TREASURE

HOARD OF GOLD LIES BURIED IN ATLANTIC MANY FATHOMS DEEP

With New Diving Suits, Even Novices Are Able to Descend 300 Feet Into Ocean Without Much Danger, but Thrills Are Nevertheless an Inseparable Part of the Diver's Life—Why Titanic Cannot Be Salvaged.

By CAPTAIN LEAVITT.

(Backed by a big syndicate, Capt. Benjamin F. Leavitt, an American, known as the world's most daring diver, is now on his way to British territorial waters to begin his task of hunting in the deep for the millions sunk during the war in the Lusitania and other ships. In this article he tells his story.)

IN the near future I hope to dig at least \$15,000,000 out of the bed of the sea off the Irish Coast.

This represents roughly the amount that went down with the Lusitania and the Arabic, but that will only be the beginning of my task, for at the present time there is reposing on the bed of the ocean vast treasures beside which the fabled treasures of the past fade into insignificance.

I intend to devote the rest of my life to the task of raising the great treasures that lie buried fathoms deep. The expedition in its first stages will cost \$500,000 at least and there are more than 600 shareholders in the company behind me.

To reach the Lusitania we shall have to dive 285 feet and for the Arabic 315 feet, which is just twice as far as any diver has ever gone in the ordinary rubber suit.

I have spent six years working out the plans for this expedition, most of the time being given to perfecting the diving suit that would enable us to go down deep enough.

In my first test with the suit I established a record by going down 385 feet and staying there long enough to prove that my outfit is good enough for the job we have on hand. Altogether I have had eight diving suits made at a cost of \$500 each.

DOWN 500 FEET.

The suits are made of manganese bronze, a quarter inch thick, the torso and breastplate solid, and the legs made of ribbons of bronze encased in rubber, with ball bearings at the shoulders.

Salvage work has never yet been possible lower than one hundred and fifty feet, because the pressure is too great. Air lines get tangled and no diver can work even at that depth for more than twenty minutes at a time with an hour and a quarter to lower and pull up.

It takes nearly all the twenty

minutes getting used to one's surroundings, without locating the wreckage. With my suit a novice can go down from three hundred to five hundred feet and remain down for four hours at least.

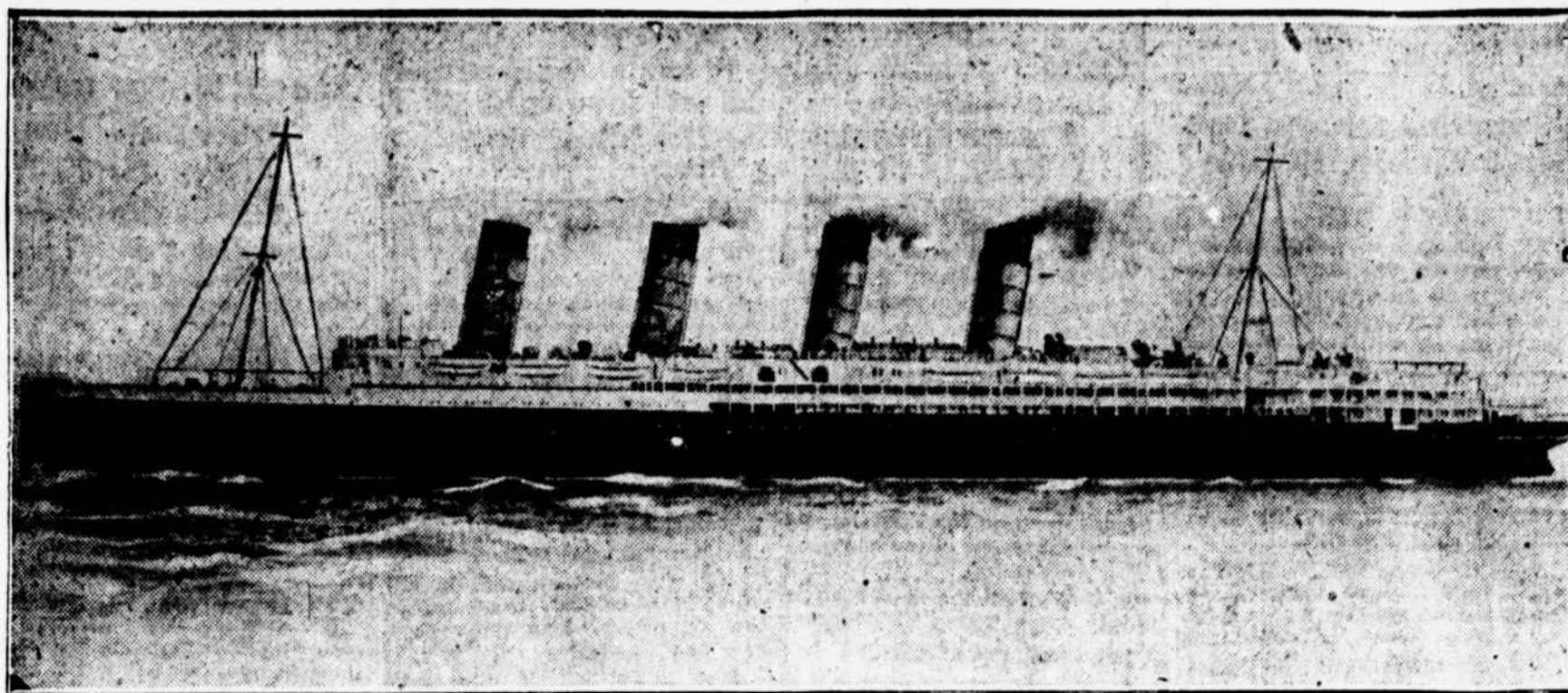
The only line that connects the diver with the ship above will be a half-inch non-twisting cable. Inside this will be a telephone wire connecting with a transmitter and receivers within the headpiece. The suit weighs three hundred and fifty pounds, but the enormous water pressure reduces this to only seventy-five pounds on the ocean bed.

To aid me in the task I shall have another invention of my own—one that will revolutionize the diving art. This is a deep-sea light, a glass globe half an inch thick, containing a three-hundred candle power bulb. A series of these will be dropped on weights, enabling the diver to see perfectly over a radius of seven feet.

\$5,000,000 RECOVERED.

The salvage ship will be held over the sunken ship by six five-ton anchors, and by electric detonation dynamite charges will be used to force open the strong rooms of the Lusitania and Arabic, so that we can get at the

THE LUSITANIA, ONCE PRIDE OF THE SEAS



bar gold and other portable treasure therein.

The deepest salvaging done in seeking war treasure was 125 feet, at the mouth of the St. Lawrence, from the Empress of Ireland. Last summer a little over five million dollars was saved from the wreckage of the Alurentic in seventy-six feet off the Irish coast. Altogether treasure to the value of ten billion dollars lies at the bottom of the sea as the result of war-time losses, and I shall be after the greater part of that if I live.

Nine-tenths of the sunken treasure is at depths of less than five hundred feet, just within the range of my suit. I am going to make the first trip myself to the Lusitania, and take a good look around before letting any of my subordinates take the risk.

There are no lack of thrills in the diver's calling, and you want strong nerves before you can take it up. I have been asked what was my most exciting adventure under the sea.

GRISLY GREETING.

I think that was some years ago when I was off the American coast searching for a steamer that had gone down with some valuable documents of importance to a well-known business man.

It was the first occasion on which I had tried my outfit and had the telephone working satisfactorily. I had reached the deck of the ship and was proceeding as cautiously as I could when I suddenly came in sight of the body of a man standing quite upright, it seemed to me, as though still on the lookout from the doomed ship. I was expecting to be hailed

SUNKEN TREASURE VESSELS

LUSITANIA, sunk in 1915 with \$7,500,000 worth of gold and jewelry; ship and cargo worth \$18,000,000.

ARABIC, sunk in 1915 with \$6,250,000 in gold.

YASAKA MARU, sunk in Mediterranean last December with \$15,750,000.

OEANA, sunk in 1912 with \$5,600,000.

MERIDA, sunk off Cape Charles in 1911 with \$1,625,000 in silver bars and \$125,000 in cash and jewelry.

GEELONG, sunk in Mediterranean with \$5,000,000 in jewels belonging to the Maharajah of Kaparthal.

ANCONA, sunk with \$2,500,000 cargo.

GENERAL GRANT, sunk off Auckland Islands in 1866 with \$18,000,000 in gold bars and bullion.

LIZARD, sunk off Cromwell with gold estimated at \$90,000,000.

from above, but did not get the usual warning ring. Instead words came to me, and I could have sworn that they came from the figure in front of me.

I felt myself turn cold with horror at this unexpected greeting from the depth of the sea, and I do not know what might have happened had I not suddenly been restored to complete touch with my friends above and heard words that told me that the message in the first instance was one from above that had in some way got crossed circuit and did not reach me in the usual way.

After that I did not have the same fear of the dead body, which had in some way been preserved for several days, and was really held up against the wheel-house by the water pressure.

You can imagine what it must feel like to have a figure like that

staring at you at the end of a deep-sea light, and I confess I felt very creepy indeed and in no way disposed to go nearer to it than I was forced to do. But the day's thrills were not over.

Suddenly I became conscious that electrical contact with the ship above had ceased, and I was seized with an uneasy feeling that something serious had gone wrong. I made the agreed signal, but the expected response did not come.

GRIN ON DEAD FACE.

There I was at the bed of the sea, with no means of communicating with my friends, and with a fear that in some strange way we had been cut off for good. At that time I had not proved the full capacity of my suit, and besides, there was always the possibility that the accident that had cut us off might cut short my air supply.

As I had been down for some two hours, you can imagine the state of mind I was in. I waited intently, listening for the slightest sound, but nothing save the noise of the in-pressing water disturbed the silence. Minutes passed—they seemed hours.

By now pressure had forced me up close against the terrible figure of the dead man I have before referred to. There was an unspeakably horrible grin on the face, as though he would mock this intruder who was paying the price for daring to pry into the secrets of the sea-bed.

I shut my eyes, being unable to stand the sight any longer, and thanked heaven that my suit saved me from the sense of contact with that ghastly figure. As the minutes passed my anxiety increased, for there was no sign of life above.

I had visions of the ship going off and leaving me there in the bed of the ocean, unable to get up again, and compelled to submit to slow asphyxiation under the sea. As yet I had not felt the slightest discomfort, but now it began to oppress me, and I felt I was sure to go mad if obliged to stay here any longer.

Then the oppression grew on me, and I had difficulty in breathing. I felt something of what people must feel when being suffocated. I was losing consciousness, and save for the head noises and oppression, it was like being overcome by gas fumes.

For a time I cannot say how long—consciousness left me altogether. Then I awoke with the sense that I was climbing up step by step, and when my senses

GRINNING CORPSE FACED CAPTAIN ON SUNKEN SHIP'S DECK

Weird Figure Seemed to Speak to Adventurer Into Realms of Neptune—How Brothers Were Reunited in a Grim Tragedy After Many Years—Many Vessels Carrying Gold and Jewels Lie on Ocean's Bottom.

were fully restored I was on the deck of the salvage ship once more, having escaped from a terrible death.

I had been over two hours down there after having lost contact, and had I been pulled up a minute later than I was, it would have been the end of my diving days.

BROTHER FOUND.

What is the strangest coincidence I have known in deep-sea diving is another question I have been asked. I think it occurred when I was in charge of the salvaging operations on the Pewabic on Lake Huron five years ago.

With me was one of my assistants, who had a brother from whom he had not heard for some years. We were roaming about the deck within the limits of our lamps when my companion betrayed obvious signs of excitement on seeing the features of one of the dead men in one of the cabins.

It was impossible, of course, for us to carry on conversation at that depth; I could only gather that we were in face of something unusually grim. My companion was pulled up in response to his signal, and later I heard the secret.

The body that he had found in that of all places was the brother he had not seen for years. Later he was able to go down again, and we brought the body up for decent burial.

The papers, still intact, showed that his recognition was correct, but I think that must be the first occasion on which two brothers who had lost trace of each other should have met after death of one in this strange place. What the dead brother had been doing on the ship we never found out.

Captain Leavitt is fifty-one years of age and has been a deep-sea diver for twenty-three years of that time. He says he would not change his occupation for anything, as he finds it the most

exciting and interesting any man could ask for. Apart from the thrill he describes above he has had no accidents in his perilous calling.

FATE OF TITANIC.

Not long ago the idea of reclaiming another giant liner, the ill-fated Titanic, the loss of which caused such a world sensation, was given up as hopeless.

After her collision with a mammoth iceberg on Sunday evening, April 14, 1912, this mighty vessel took her last plunge and carried 1,500 people to a grave beneath the sea in the cold gray hours of the following morning.

As the Titanic went down with a tremendous amount of bullion and wealth in the shape of passengers' private belongings, many salvage companies were attracted by the richness of the prize.

But the silent sea has refused to give up its secret hoard, and wealth that went down with this great ship has added another fraction to the untold treasure that lies under water.

What is the Titanic's location today? No one knows. It is this fact alone all which has made salvage here an impossibility.

Many theories have been advanced as to the fate of the vessel. There are some experts who state that the ship could not reach the seabed. It was sunk in the deepest ocean in the world, the North Atlantic.

They consider it is drifting about under the surface, midway between the surface and the bottom, at the will of undercurrents. Slowly being eaten away by sea action, it may one day drift into shallow waters, where it may become a menace to shipping, or where it may, by a lucky chance, be discovered and forced to yield up its rich hoard.

Some there are who declare that she dived right down to the bottom, despite the terrific water resistance at that spot. Again there are others who believe that pressure of water has long since burst her into atoms.

SOAPSUDS ONE OF BEST POISON GASES :- By WOODS HUTCHINSON

BEAUTY may be only skin deep—but the reverse of it often goes much farther in, even "to the bone."

The recent "Red" outbreak which has spread all over the world is, according to cynics, like a rash, very irritating and widespread, but not particularly serious.

To this the enthusiastic radical might retort that both conditions had another point in common; they showed that all was not well beneath the surface. For the surface of the body is the only part that we can readily see, and the change which takes place upon it are often simply the reflections of similar alterations occurring in the interior.

The skin is the mirror of the body, or more precisely its bulletin board or photo film. A striking example of this is the extraordinary bronzing of the skin in Addison's Disease, which is due to an affection of the adrenal gland, usually tuberculous. While Addison's Disease results in a steady darkening of the skin, it does not create any local disease of the skin or cause any discomfort.

Sinn Fein Methods

On the other hand, the lesser explosions announce their presence in no uncertain manner; their mission in life is to attract attention, and they adopt Sinn Fein methods of doing so.

Very appropriately, these physiologic communitists often appear in a costume of glowing red; the chief difference between them and some of their human prototypes is that, once the trouble which they herald has been righted, they disappear peacefully and promptly, instead of looking

for another grievance, and keeping right on at the old stand.

Eczema, pruritus and, above all, the hives, rank high among Nature's storm-signals; indeed, she uses them so liberally that our chief trouble is not in perceiving that something is out of order, but in discovering just which one of a score of suspects is causing the trouble.

High among these red lanterns and "detour" signals stands pruritus. Like Charity, it covers a multitude of sins; for its name simply means "itching," and under its banner are grouped almost every type of skin trouble which possesses the one simple admission requirement, and which cannot be ascribed to any obvious and visible cause. Simply a vagabond itch without visible means of support.

Righted By Diet.

Its causes range from a very direct reaction to the nefarious activity of certain small organisms and parasites on the surface of the skin to plain hysteria and hallucinations; but it is most often due to either dietetic unbalance or to specific nervous disturbances.

This latter condition causes the most persistent and irritating cases of pruritus, where the itching is confined to one locality, but this type cannot be dealt with except by experts in dermatological clinics.

The other general division, that caused by dietetic or similar disturbances, is much more amenable to reason. This type of pruritus almost always depends upon a specific unbalance which can generally be righted by proper attention to diet and bodily hygiene.

One of its commonest causes is inadequate elimination of either or both of the body wastes, and this type can be cured by a brief course of cathartics or kidney stimulants, as the case may be, with milk and vegetable diet, and

"A Clear Skin Is Next to a Clear Conscience in the Furtherance of Our Material Well-Being.—Eczema, When Neglected, Has the Disconcerting Habit of Becoming Chronic."

its return prevented thereafter by diet and exercise.

This form is due to the "backing up" of certain toxic materials in the blood, which promptly registers an objection through its ally and spokesman, the nervous system, and keeps right on objecting until a return to normalcy has not only been promised but attained.

In the corpulent type there is a tendency to over-perspiration and the formation of "hostile sectors" between rolls of fat or at points of friction; in the thin and spare the skin tends to become dry and harsh and to crack and split wherever there is any considerable tension.

"Beanpole" Variety.

The "beanpole" variety will often get a worse case of it than the "hayrick" type; for his skin, being more or less tightly fitted to his bony framework, does not have the elasticity nor the depth of cushioning and freedom of movement possessed by his better-padded opposite.

The treatment of both forms is comparatively simple. "The quantity of talcum is not strained, but falleth like the gentle rain from Heaven" upon the afflicted regions of pruritus in the overcoat, in dusting powders of boric acid, starch, menthol, soda, etc.

While, in the opposite condition, the liberal use of salves and creams of similar composition, plus two to five per cent of camphor, resorcin, ichthylol or salicylates, are advisable as a temporary measure.

In both cases, the really curative treatment is begun by encouraging the patient to take liberally of milk and articles containing vegetable salts, such as oranges, lemons, grapes, apples and green vegetables.

This tends to flush out the system, relieve acidosis or other toxic conditions, and build up any parts of the bodily structure which are under-nourished, and very often is sufficient to straighten out the metabolic kink which caused all the trouble.

Disturbs Nerves.

Should the itching still persist, a careful general examination should be made; for, as has been said, digestive upsets are by no means the only cause of the piling up of toxins producing trouble.

Certain forms of kidney trouble will have this same effect; indeed, persistent itching is one of the earliest signs of Bright's disease and other kidney disturbances, and the earlier that such mischief can be located, the better.

Severe itching, as might be expected, also occurs in jaundice and in diabetes, due to the irritating effect upon the skin or, in the first case, the bile, and in the second the sugar and acids with which the blood is loaded.

Pruritus is essentially a disturbance of the nerves, due to internal causes, and the itching often occurs without any marked alteration or roughening of the surface of the skin. If, however, one "obeys that impulse" and proceeds to rub and scratch vainly

at the afflicted area, the surface may become broken and irritated, and the second of the dermatological "Handy Andys" may appear. This latter is eczema.

The good old Biblical custom of solemnly loading the sins of an entire people upon the head of one unsuspecting goat, which was then sent careering out across the deserts to its doom, has few closer parallels than the way in which eczema has been made to bear the responsibility for a host of evils.

"Oh, eczema, what itches are permitted in thy name!" Almost any reaction to external irritants, causing a tangible and visible eruption on the skin before itching begins is followed by oozing and scaling, is enrolled beneath its banner, even as the other internally caused types, without visible eruption, find refuge beneath the outspread wings of pruritus.

Types of Eczema.

Eczema, popularly known as "sail rheum," "tetter" and "prickly heat," marked by thickening tiny blisters and crusts, might be broadly described as the commonest inflammatory eruption of the skin; and in contrast to pruritus, most largely occurs as a result of outside irritation. Almost every manufacturing trade or calling has its particular type of eczema, especially when working conditions involve the presence of irritating dusts on the hands and in the air.

Workers in coal yards or boiler rooms and in some of the me-

chanical trades, where machine grease is present in quantity, are not quite as liable to attacks of eczema as are those in flouring mills and bakeries; for instance.

Because in the former trades the dust or dirt which adheres to the skin is so strikingly visible that it is generally washed off before it can start any trouble.

In the latter occupation, however, the particles are much less self-evident, and may remain upon the surface and mix and ferment with the waste products of perspiration until the skin can stand the annoyance no longer, and bursts into eruption.

A Clean Skin.

This condition used to be especially common among "bakers" and confectioners in the days before machinery had largely supplanted hand work in the preparation of doughs and candies, and was known as "baker's itch," or sugar eczema.

There were two irritating factors at work here—one, the dust of the wheat flour; the other, the pulverized sugar which forms such an essential element in the great majority of confections. Flour and sugar are admirable and vital elements in our economy—when taken internally, but any external applications of them, especially of the latter, will exasperate the body tissues with great promptitude.

The recent introduction of machinery, which eliminates these "personal contacts" between the worker and the materials in

which he deals, and the sucking up of dusts by fans, have done much to decrease the frequency of eczema in this and similar trades.

Even more credit is due, however, to the increasing availability of soap and hot water, which make frequent and thorough ablutions a pleasure and not an ordeal as heretofore.

A clean skin is next to a clear conscience in the furtherance of our material well-being, and a lather of soapsuds is one of the best poison gases yet devised against the onslaught of belligerent bacilli.

The other, or internal causes of eczema are much the same as those of pruritus—namely, toxic "pile-ups," digestive upsets (which often amount to the same thing), kidney troubles, gout, diabetes and nervous disturbances.

The treatment follows similar lines—soothing dusting powders, lotions and poultices to alleviate immediate discomfort, followed by a physiological overhauling to locate and correct the cause of the trouble.

A Common Cause.

One quite common cause of eczema is food-poisoning of some sort. In very severe cases, the reactions to certain common articles of diet may be so prompt and striking that no doubt is left about the matter, and the offending substance can be dropped from the muster-roll of the menu. But more often this susceptibility can only be detected by special clinical tests. Inability properly to digest starches and fats is another common cause.

Eczema is a more serious affection than pruritus, not merely because it causes very distressing eruptions, itching, which breaks sleep and destroys appetite, fissures and "weeping," but because

the disorder and weakened state to which it reduces the skin renders it much more susceptible to outside septic infections.

This danger is greatly increased by the almost irresistible desire to scratch the afflicted area, thereby making confusion worse confounded.

For more gateways are open to infection, and any germs which may be lurking upon the surface or beneath the nails of the scratching hand are given an ideal opportunity to take root and prosper.

This is also true, to a lesser degree, of pruritus; in both cases, the natural impulse to rub and claw at the source of irritation must be sternly repressed.

The Best Cure.

The best way to aid in such abatement is to cover the inflamed area with a bandage, beneath which is spread some soothing dressing. Of these perhaps the most generally useful is a small amount (10 per cent or 15 per cent) of boric acid mixed with any good cold cream.

This combination is quite harmless and has a marked quieting effect upon the skin eruptions of most varieties, as also does boric acid dissolved in a lotion or made into a poultice with boiled starch, or mixed with dry starch and a little soda into a dusting powder.

Witch hazel is another admirable "stand-up-by," as one distinguished foreigner expressed it, and is good for a host of other minor household afflictions as well.

Next to these comes the coal-tar product, resorcin, generally applied as a salve (2 to 5 per cent), and which almost equals boric acid in the extent of its usefulness; while in severe cases, a coating of ichthylol will often bring great relief; then zinc oxide salve, and later weak lotions of tar.